Application No. 09/473,003   JAN 1 3 2005
Attorney Docket No. 15-IS-5283
Amendment dated January 18, 2005

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1.   (Currently Amended) In a picture archiving and communication system (PACS), a method of processing [[raw]] image data at a PACS display workstation, the method comprising:

retrieving from a PACS database, using a PACS display workstation, ~~raw image data, which has not been fully~~ <u>partially preprocessed raw image data, said partially preprocessed raw image data having been partially</u> preprocessed according to a predetermined subset of preprocessing functions applied to [[said]] <u>modality</u> raw image data at an acquisition workstation, <u>said modality raw image data</u> delivered from an imaging modality;

selecting from a PACS database, using the PACS display workstation, a first preprocessing function for the <u>partially preprocessed</u> raw image data, ~~which has not been fully preprocessed according to said predetermined subset of preprocessing functions applied at said acquisition workstation, delivered from the imaging modality,~~ wherein said first preprocessing function is stored in said PACS database, said first preprocessing function ~~differing from~~ <u>not included in</u> said predetermined subset of preprocessing functions; and

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~~processing said raw image data, which has not been fully preprocessed~~ ~~according to said predetermined subset of preprocessing functions applied at said~~ ~~acquisition workstation, at the PACS display workstation by~~ applying, **using the** **PACS display workstation,** the first preprocessing function to the **partially** **preprocessed** raw image data to create resultant image data.

2.   (Currently Amended) The method of claim 1, wherein the step of retrieving **partially preprocessed** raw image data further comprises retrieving frequency preprocessed raw image data.

3.   (Currently Amended) The method of claim 1, wherein the step of retrieving **partially preprocessed** raw image data further comprises retrieving contrast preprocessed raw image data.

4.   (Original)   The method of claim 2, wherein the step of selecting further comprises selecting a contrast preprocessing function.

5.   (Original)   The method of claim 3, wherein the step of selecting further comprises selecting a frequency preprocessing function.

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6.   (Original)   The method of claim 4, wherein the step of selecting further comprises selecting a contrast preprocessing function characterized by at least one of a GT, GA, GC, and GS preprocessing parameter.

7.   (Original)   The method of claim 5, wherein the step of selecting further comprises selecting a frequency preprocessing function characterized by at least one of a RN, RE, and RT preprocessing parameter.

8.   (Original)   The method of claim 1, further comprising the step of applying an image processing function to the resultant image data to create processed resultant image data.

9.   (Original)   The method of claim 8, further comprising the step of displaying the processed resultant image data.

10.   (Original)   The method of claim 1, further comprising the step of storing the resultant image data in the PACS database for future retrieval.

11.   (Currently Amended) In a picture archiving and communication system (PACS), a PACS display workstation comprising:

a processing circuit:

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a PACS network interface coupled to the processing circuit; and

a software memory coupled to the processing circuit, the software memory storing instructions for:

retrieving from a PACS database **partially preprocessed** raw image data, ~~which has not been fully~~ **said partially preprocessed raw image data having been partially** preprocessed according to a predetermined subset of preprocessing functions applied to [[said]] **modality** raw image data at an acquisition workstation, **said modality raw image data** delivered from an imaging modality;

selecting from a PACS database a first preprocessing function for the **partially preprocessed** raw image data, ~~which has not been fully preprocessed according to said predetermined subset of preprocessing functions applied at said acquisition workstation, delivered from the imaging modality,~~ wherein said first preprocessing function is stored in said PACS database, said first preprocessing function ~~differing from~~ **not included in** said predetermined subset of preprocessing functions; and

~~processing said raw image data, which has not been fully preprocessed according to said predetermined subset of preprocessing functions applied at said acquisition workstation, at the PACS display workstation by~~ applying the first preprocessing function to the **partially preprocessed** raw image data to create resultant image data.

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12.   (Currently Amended) The PACS display workstation of claim 11, wherein the **partially preprocessed** raw image data corresponds to an anatomical region, and wherein the preprocessing function is selected based on the anatomical region.

13.   (Currently Amended) The PACS display workstation of claim 11, wherein the **partially preprocessed** raw image data is frequency processed raw image data.

14.   (Currently Amended) The PACS display workstation of claim 11, wherein the **partially preprocessed** raw image data is contrast preprocessed raw image data.

15.   (Original)   The PACS display workstation of claim 13, wherein the preprocessing function is a contrast preprocessing function.

16.   (Original)   The PACS display workstation of claim 14, wherein the preprocessing function is a frequency preprocessing function.

17.   (Currently Amended) The PACS display workstation of claim 15, wherein the contrast preprocessing function characterized by at least one of a GT, GA, GC, and GS preprocessing parameter.

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18.   (Original)   The PACS display workstation of claim 16, wherein the frequency preprocessing function characterized by at least one of a RN, RE, and RT preprocessing parameter.

19.   (Original)   The PACS display workstation of claim 11, wherein the software memory further comprises instructions for applying an image processing function to the resultant image data.

20.   (Original)   The PACS display workstation of claim 11, wherein the software memory further comprises instructions for storing the resultant image data in the PACS database for future retrieval.

21.   (Currently Amended) A medical data network comprising:
an image modality;

an image acquisition workstation;

a PACS network interfaced to the image acquisition workstation, the PACS network comprising a networked PACS image database, a PACS display workstation, and a preprocessing database, and wherein the PACS display workstation comprises:

    a processing circuit;

    a PACS network interface coupled to the processing circuit; and

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a software memory coupled to the processing circuit, the software memory

storing instructions for:

retrieving from ~~a PACS~~ the preprocessing database partially

preprocessed raw image data, ~~which has not been fully~~ said partially

preprocessed raw image data having been partially preprocessed

according to a predetermined subset of preprocessing functions applied to

[[said]] modality raw image data at [[an]] the image acquisition

workstation, said modality raw image data delivered from [[an]] the

imaging modality[[,]];

~~wherein said first preprocessing function is stored in said~~

~~PACS database, said first preprocessing function differing from said~~

~~predetermined subset of preprocessing functions;~~

selecting from ~~a PACS~~ the preprocessing database a first

preprocessing function for the partially preprocessed raw image data,

wherein said first preprocessing function is stored in said

preprocessing database, said first preprocessing function not included

in said predetermined subset of preprocessing functions ~~delivered~~

~~from the imaging modality~~; and

~~processing said raw image data, which has not been fully~~

~~preprocessed according to said predetermined subset of preprocessing~~

~~functions applied at said acquisition workstation, at the PACS display~~

~~workstation by~~ applying the first preprocessing function to the **partially**

preprocessed raw image data to create resultant image data.

22.   (Original)   The medical data network of claim 21, wherein the first

preprocessing function is a contrast preprocessing functions.

23.   (Original)   The medical data network of claim 22, wherein the contrast

preprocessing function characterized by at least one of a GT, GA, GC, and GS

preprocessing parameter.

24.   (Original)   The medical data network of claim 21, wherein the first

preprocessing function is a frequency preprocessing function.

25.   (Original)   The medical data network of claim 24, wherein the

frequency preprocessing function characterized by at least one of a RN, RE, and RT

preprocessing parameter.